

Montana

Department of Environmental Quality

The “Guidon” Event

Montana Air Quality Permit Process Streamlining



The “Guidon” Event

- Effort to streamline air permitting process
- Utilized “Kaizen” methodology
 - *Kaizen: Japanese word meaning **continuous improvement***
- Results in immediate improvements/process changes that do not require large capital expenditures

Kaizen Process

- Clear objectives
- Team process
- Tight focus on time
- Quick and simple
- Necessary resources immediately available
- Immediate results

Event Details

- Pre-event: March 19, 2008
 - Introduce team
 - Define scope of project
 - Determine project objectives
- Event: April 14, 2008 – April 17, 2008
 - Training on Lean, Six Sigma, and similar business process improvement methods
 - Map current permit process
 - Identify bottlenecks, areas for improvement
 - Break into focus groups to brainstorm solutions
 - Map new process
 - Develop 'Action Item' List
 - Implement changes

Team

- Consisted of 14 members within ARMB
 - Permit Writers (3)
 - Compliance Officer (1)
 - Lead Engineer (1)
 - Modeling (1)
 - SIP/Planning (1)
 - Administrative Support (1)
 - Database (2)
 - Registration (1)
 - Management (3)
- Program Experience varied from 6 months to 20+ years

Event Scope & Objectives

Scope

MAQP permitting for new applications and modifications

- Receipt of permit application to Department Decision

Objectives

- **Reduce lead time**
- **Reduce incomplete applications**
- **Reduce permit rework**
- **Reduce paperwork & paper consumptions**
- **Eliminate registration backlog**
- **Ensure the right people are working on the right things**
- **Increase consistency among permits**
- **Eliminate “fire fighting”**
- **Maintain or improve employee and customer satisfaction**

Other Information

Sponsor: Dave Klemp

Champions: Vickie Walsh, Dave Aguirre

Overarching Themes:

- **Improve permit quality**
- **Meet/Exceed statutory timeframes**
- **Increasing workload...no increase in staff**
- **Operational efficiency...capacity management**

Annual Workload (new applications):

- **Portable 120**
- **Stationary 80**
- **Registration 100**

Statutory Requirements

- **Receipt of application → initial review 30 days**
- **Complete application → Dept. decision 60 – 75 days**

Measures of Success

Measure	Current Level	Target	Gap
Lead Time (# days)	50	45	5
Incomplete Applications (%)	10	5	5
Permit Rework (per permit)	19	5	14
Paper Consumption (cases/year)	40	20	20
Registration Backlog (# apps)	537	0	537

CURRENT PROCESS



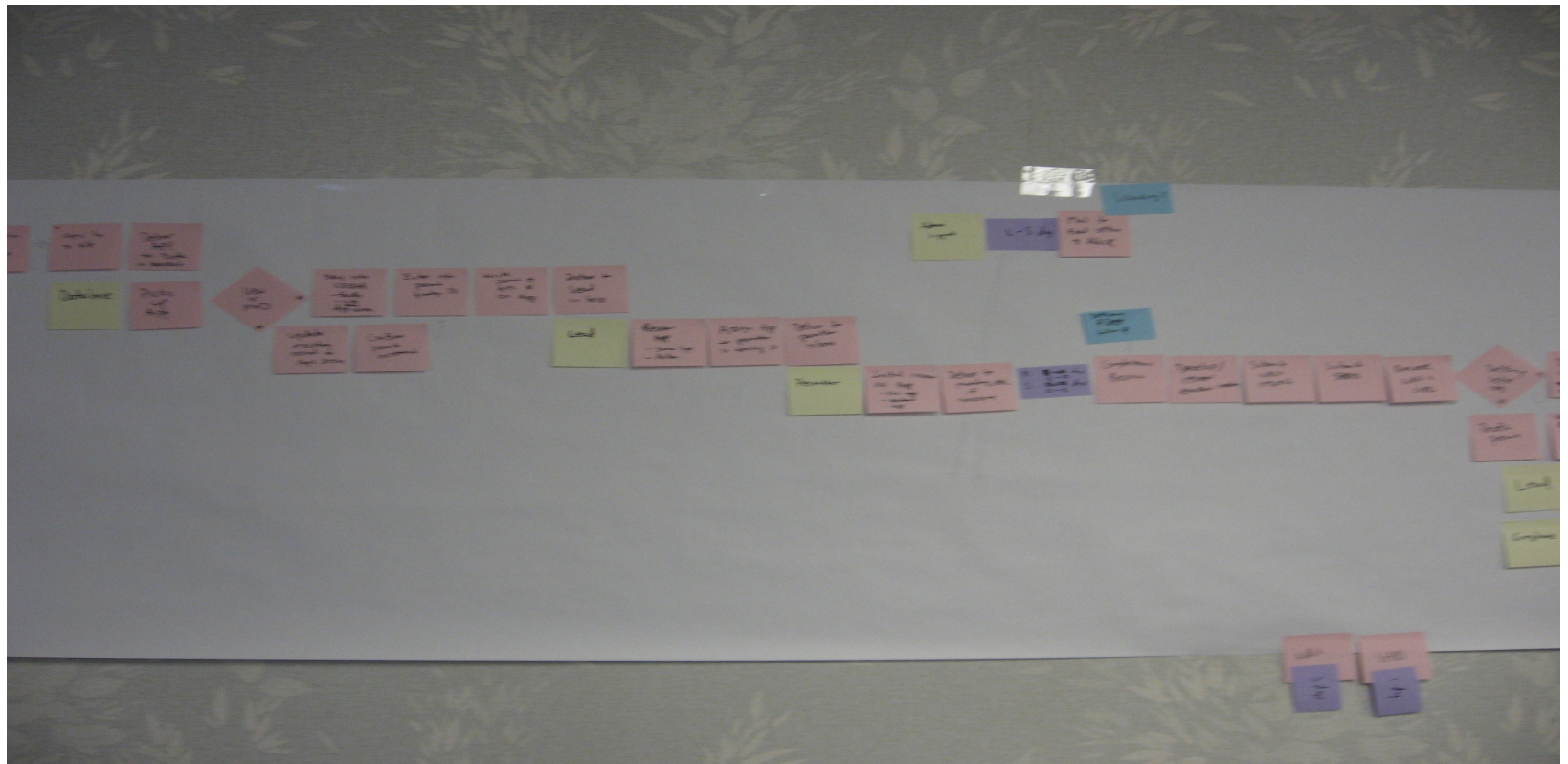
Current Process

Measure	Current Level
Number of steps	149
Number of handoffs	45
Decisions	12
Loopbacks	4
Delays	15
Value-added steps	7
Value-added percentage	4.7%
Cycle time	38-106
Lead time (PD)	14-44 days
Lead time (DD)	29-59 days

New Process Highlights

- **Consolidates permit tracking**
- **Implements electronic processing and filing**
- **Creates new tools for permit writers**
- **Eliminates redundant reviews by lead engineer and administrative support staff**
- **Implements permit peer reviews in order to increase consistency in permits and train new staff**
- **Trains permit writers to use and enter data into Department database**
- **Updates/simplifies permit application forms**

NEW PROCESS



Measurement of Success

Measure	Current Level	Future	Percent Change
Number of steps	149	71	52%
Number of handoffs	45	18	60%
Decisions	12	7	42%
Loopbacks	4	0	100%
Delays	15	9	40%
Value-added steps	7	7	-
Value-added percentage	4.7%	9.9%	5.2%
Cycle time	38-106	30-94	21-11%
Lead time (PD)	14-44 days	7-28days	50-36%
Lead time (DD)	29-59 days	22-43days	24-27%

Putting Process into Action

- **Piloting Efforts Underway**
- **New application forms to be released this month**
- **Outreach Efforts for Applicants Planned**
- **Plan to conduct “kaizen” process in other permitting areas of ARMB**
 - **Oil and Gas Registration**
 - **Title V**
 - **NSR**